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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/718,659

11/24/2003

Masataka Aoki

1165

24956

7590

07/06/2005

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
1800 DIAGONAL ROAD
SUITE 370
ALEXANDRIA, VA 22314

EXAMINER

GREENE, DANIEL LAWSON

ART UNIT

PAPER NUMBER

3663

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/718,659	AOKI ET AL.	
	Examiner	Art Unit	
	Daniel L. Greene Jr.	3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-20 and 29-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-20 and 29-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 10/125,608.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/125,608, filed on 4/19/2002 now abandoned.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore;
 - a. the structure "fixing" the traveling device and the lifting device and having a space therein for allowing said reactor pressure vessel to be positioned inside said structure under the condition that said reactor pressure vessel is being lifted by said lifting device as set forth in claim 14, and
 - b. the structure fixing the traveling device and the lifting device and having a space therein for allowing said reactor pressure vessel to be positioned inside said structure ONLY under the condition that said reactor pressure vessel is being lifted by said lifting device and NOT having a space therein when the reactor pressure vessel is NOT being lifted by the lifting device as set forth in claim 14, and
 - c. the embodiment wherein ONE beam is supported by ALL of the plurality of columns and hoisting columns as set forth in claim 14, and
 - d. an equipment of handling a structure according to claim 14 wherein a total number of columns is 7, 9, 10, 11, 12, 13, 14, and 15 as set forth in claim 18,

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. **Claims 14-20 and 29-31 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the plurality of columns and hoisting columns being located OUTSIDE of the nuclear reactor building, does not reasonably provide enablement for the plurality of columns being arranged around the INSIDE of the nuclear reactor building. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.** Applicant's 4/19/2005 amendment introduced the limitation "wherein said beam is supported by said plurality of columns and said hoisting columns". Given the broadest reasonable interpretation, it is possible for the plurality of columns to be arranged around the inside of the nuclear reactor building whereas the hoisting columns have been positively recited as being arranged outside of the nuclear reactor building. Now it is not clear of the relationships of the plurality of columns and the hoisting columns such that the beam can be supported in the manner claimed.

6. **Claims 14-20 and 29-31 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for two beams being supported by the plurality of columns and hoisting columns, does not reasonably provide enablement for ONLY ONE BEAM being supported by the plurality of columns and hoisting columns. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.** Applicant's

4/19/2005 amendment introduced the limitation "wherein said beam is supported by said plurality of columns and said hoisting columns". The use of terminology "said beam" is understood to mean that ONLY ONE BEAM is supported by the plurality of columns and hoisting columns. However there is no disclosure of how and in what manner a single beam is being supported by each and every one of the pluralities of columns **and** each and every one of the hoisting columns including an operative embodiment of such.

7. Claims 14-20 and 29-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

a. Applicants 4/19/2005 amendment introduced the limitation "a structure fixing said traveling device and said lifting device" (underlining added) to claim 14. This limitation is considered new matter in that it is not seen wherein the specification this terminology is used. It is unclear whether any type of structure would be capable of performing this limitation or why the traveling and lifting devices would need to be repaired or "fixed".

b. Applicants 4/19/2005 amendment introduced the limitation "a structure fixing the traveling device and the lifting device and having a space therein for allowing said reactor pressure vessel to be positioned inside said structure under the condition that said reactor pressure vessel is being lifted by said lifting

device" (underlining added) to claim 14. This is considered new matter since it is not seen wherein the specification a structure with such capabilities has been disclosed such that the space no longer exists when the reactor pressure vessel is NOT being lifted by the lifting device. It would appear that if a structure has space for a reactor pressure vessel when the reactor pressure vessel is being lifted by the lifting device, it would have space for a reactor pressure vessel all the time.

c. Applicants 4/19/2005 amendment introduced the limitation "wherein said beam is supported by said plurality of columns and said hoisting columns" to claim 14. This is considered new matter since it is not seen wherein the specification a structure with such capabilities has been disclosed such that the ONLY ONE BEAM is supported by all plurality of columns and said hoisting columns as set forth in claim 14.

d. Newly added claim 31 contains the limitation "wherein said beam is arranged so that said lifting machine travels on said beam in a direction that said lifting machine comes farther away from said spent fuel pool". Besides being poorly phrased, this limitation is considered new matter since the specification fails to disclose how and in what manner the invention can operate if the lifting machine must come farther away from said spent fuel pool, then it does not appear said lifting machine would ever be able to travel close enough to the reactor pressure vessel to function in the manner claimed. It is noted that this appears to be a statement of intended or desired use.

8. Claims 14-20 and 29-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

a. Applicants 4/19/2005 amendment introduced the limitation “a structure fixing said traveling device and said lifting device” (underlining added) to claim 14. There is no adequate description or enabling disclosure of what all is meant and encompassed by the phrase “a structure fixing said traveling device and said lifting device”. See the discussion of this phrase in section 7 above.

b. Applicants 4/19/2005 amendment introduced the limitation “a structure fixing the traveling device and the lifting device and having a space therein for allowing said reactor pressure vessel to be positioned inside said structure under the condition that said reactor pressure vessel is being lifted by said lifting device” (underlining added) to claim 14. There is no adequate description or enabling disclosure of what all is meant and encompassed by the phrase “a structure fixing the traveling device and the lifting device and having a space therein for allowing said reactor pressure vessel to be positioned inside said structure under the condition that said reactor pressure vessel is being lifted by said lifting device”. See the discussion of this phrase in section 7 above.

c. Applicants 4/19/2005 amendment introduced the limitation “wherein said beam is supported by said plurality of columns and said hoisting columns” to

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claim 14. There is no adequate description or enabling disclosure of what all is meant and encompassed by the phrase "wherein said beam is supported by said plurality of columns and said hoisting columns". See the discussion of this phrase in section 6 above.

d. Applicants 4/19/2005 newly added claim 31 includes the limitation "wherein said beam is arranged so that said lifting machine travels on said beam in a direction that said lifting machine comes farther away from said spent fuel pool". There is no adequate description or enabling disclosure as to what all is meant and encompassed by the phrase "wherein said beam is arranged so that said lifting machine travels on said beam in a direction that said lifting machine comes farther away from said spent fuel pool". See the discussion of this limitation in section 7 above.

9. Claims 14-20 and 29-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Applicants 4/19/2005 amendment introduced the limitation "a structure fixing said traveling device and said lifting device" to claim 14 making the claim vague, indefinite and incomplete as to what all is meant and encompassed by the phrase "a structure fixing said traveling device and said lifting device". See the discussion of this phrase in section 7 above.

b. Applicants 4/19/2005 amendment introduced the limitation “a structure fixing the traveling device and the lifting device and having a space therein for allowing said reactor pressure vessel to be positioned inside said structure under the condition that said reactor pressure vessel is being lifted by said lifting device” to claim 14 making the claim vague, indefinite and incomplete as to what all is meant and encompassed by the phrase “a structure fixing the traveling device and the lifting device and having a space therein for allowing said reactor pressure vessel to be positioned inside said structure under the condition that said reactor pressure vessel is being lifted by said lifting device”. See the discussion of this phrase in section 7 above.

c. Applicants 4/19/2005 newly added claim 31 is vague, indefinite and incomplete as to what all is meant and encompassed by the limitation “wherein said beam is arranged so that said lifting machine travels on said beam in a direction that said lifting machine comes farther away from said spent fuel pool. See the discussion of this limitation in section 7 above.

d. Applicants 4/19/2005 amendment introduced the limitation “a traveling device moving along said beam between said hoisting columns and said opening portion” (underlining added) to claim 14 making the claim vague, indefinite and incomplete because the limitation “moving” does not positively recite whether the “traveling device” is “moving” all the time or some of the time.

e. Applicants 4/19/2005 amendment introduced the limitation “a traveling device moving along said beam between said hoisting columns and said opening

portion" (underlining added) to claim 14 making the claim vague, indefinite and incomplete because the beam is never recited as being between said hoisting columns and said opening portion.

f. Applicants 4/19/2005 amendment introduced the limitation "under the condition that said reactor pressure vessel is being lifted by said lifting device" to claim 14 making the claim vague, indefinite and incomplete because this appears to be a direct translation from a foreign language and is nonsensical.

g. Applicants 4/19/2005 amendment introduced the limitation "jack-type lifting device" to claim 14 making the claim vague, indefinite and incomplete because the claim includes elements not actually disclosed (those encompassed by "jack-type lifting device", thereby rendering the scope of the claim unascertainable.

See MPEP § 2173.05(d).

h. Claim 16 is vague, indefinite and incomplete because applicants 4/19/2005 amendment introduced the limitation "hoisting columns arranged outside said nuclear reactor building" to claim 14, from which claim 16 depends, thus it is no longer clear which "column" claim 16 is referring to.

i. Claim 18 is vague, indefinite and incomplete because applicants 4/19/2005 amendment introduced the limitation "hoisting columns arranged outside said nuclear reactor building" to claim 14, from which claim 18 depends, thus it is no longer clear which "columns" claim 18 is referring to.

- j. Due to applicant's 4/19/2005 amendment there is no longer proper antecedent basis for all the terms present in the claims. See for example: "said column" in claim 16, "said columns" in claim 18, etc.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 14-20 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,252,922 to Hasegawa et al. in view of U.S. Patent 5,718,550 to Lanigan, Sr. et al. and further in view of JP9-142791-A to Ishikawa.

Hasegawa discloses a nuclear reactor building containing therein a reactor pressure vessel and a spent fuel pool and an opening portion above said reactor pressure vessel as explained in section 7.) of the 11/19/2004 Office Action, however Hasegawa uses a large scale lifting machine (91) that does not appear to have all the limitations of claim 14.

Lanigan teaches that it is old and advantageous to utilize a load transferring system that can quickly, efficiently, and safely handle moving structures/articles/ equipment from one place to another, comprising:

a plurality of columns ((42) and (70)) a beam (38); and

hoisting columns ((42) reads on those columns closest to the load at the time of hoisting as well as columns (70)); and

a lifting machine having a traveling device (62), a jack-type (70) lifting device, and a structure fixing said traveling device and said lifting device and having a space (reads on the space between columns (70) see for example figures 5 and 6) therein for allowing said reactor pressure vessel to be positioned inside said structure under the condition that said reactor pressure vessel is being lifted by said lifting device, wherein said beam is supported by said plurality of columns and said hoisting columns in figures 1-3, 5-10 and 12, column 1, lines 49-52, 65, column 4, lines 43+, and column 5.

Lanigan and Hasegawa are analogous art because they both deal with the movement of large structures from one place to another.

At the time of applicant's invention, it would have been obvious to one of ordinary skill in the art to replace the large scale lifting machine of Hasegawa with the load transferring system of Lanigan for the benefits of improved efficiency, safer handling, automated placement, etc. as taught to be old and advantageous by Lanigan.

If applicant is of the opinion that Lanigan's extendable columns (70) are not a "jack-type" lifting device, then it would have been obvious to use the hole-type jack system of Ishikawa to replace either columns (70), or the cable and pulley wheel system, or both, for the benefits of stabilizing and balancing the load

as taught by Ishikawa to be old and advantageous for lifting operations of large sized heavy articles. See for example paragraph Ishikawa [0007] on page 11/38.

Regarding Claim 15, wherein a distance between a lower most plane of said lifting device and an upper plane of said nuclear reactor building is greater than a height of said reactor pressure vessel, it would be obvious that, in order for a lifting device to function as required, it must be capable of lifting whatever item it is moving, above the location said item is to be moved to, including any obstacles between the initial and final resting places of said item.

Claim 16 is disclosed in Lanigan figures 1 and 12 wherein the transporting machine is movable along said column from the ground level up to at least the height of said nuclear reactor building wherein it is understood that columns (70) are extendable and retractable and can be constructed to any length desired.

Regarding claim 17, beam (38) of Lanigan is inherently capable of being connected to said building at a position near said opening portion or to any other position desired.

Claim 18 is disclosed in Lanigan figures 1 and 2 wherein it is understood that the limitation "the total number of said columns is greater than 6 and smaller than 16" reads on the 4 columns (42) supporting the entire structure and the 4 retractable columns (70) lifting the loads, which is 8 columns total.

Regarding claim 19, said traveling device obviously must have a motive power for running on said beam, see column 4, lines 60-62.

Regarding claim 20 it must be understood that said lifting machine must comprise a fixing mechanism for fixing said lifting machine onto said beam otherwise the lifting machine would not remain fixed with said beam and would not function as disclosed.

Claims 29-30 are considered to be statements of intended and or desired use, which Lanigan is inherently capable of being used in the manner disclosed by applicant by the simple placement of the load transferring system in the appropriate location with respect to the nuclear reactor building, reactor building, and it is not whether one would want to, or desire to locate or position Lanigan such that the beam is not over the spent fuel pool, it is whether Lanigan is inherently capable of being manipulated or operated in that manner, and it is only necessary that the capability be present.

As to limitations which are considered to be inherent in a reference, note the case law In re Ludtke, 169 USPQ 563, In re Swinehart, 169 USPQ 226, In re Fitzgerald, 205 USPQ 594, In re Best et al, 195 USPQ 430, and In re Brown, 173 USPQ 685,688.

It is noted that the claim contains statements of intended or desired use.

However, there is well settled case laws that such statements (such as, arranged so that the lifting machine travels away from the spent fuel pool, is connected to said building, for allowing said reactor pressure vessel to be positioned, etc.) as to possible future acts or to what may happen in a method or operation, are

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essentially method limitations or statements of intended or desired use and do not serve to patentably distinguish the claimed structure over that of the references. See In Re Pearson, 181 USPQ 641; In re Yanush, 177 USPQ 705; In re Finsterwalder, 168 USPQ 530; In re Casey, 152 USPQ 235; In re Otto, 136 USPQ 458; Ex parte Masham, 2 USPQ 2nd 1647.

See MPEP 2114, which states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ 2nd 1647.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. In re Danly, 120 USPQ 528, 531.

Apparatus claims cover what a device is, not what a device does. Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ 2nd 1525, 1528

As set forth in MPEP 2115, a recitation in a claim to the material or article worked upon, does not serve to limit an apparatus claim.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not


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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel L. Greene Jr. whose telephone number is (571) 272-6876. The examiner can normally be reached on Mon-Fri 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on (571) 272-6878. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DIG 
June 23, 2005


JACK KEITH
PRIMARY EXAMINER

SPE 3663